Title: METHOD FOR DETERMINING ATTITUDE OF AN OBJECT Attorney Docket No.: 7784-000389; Boeing Ref. No.: 01-312 (010011) Inventor: Thomas P. Weismuller

Mark D. Elchuk - (248 641-1600) Harness, Dickey & Pierce, P.L.C.

1/3

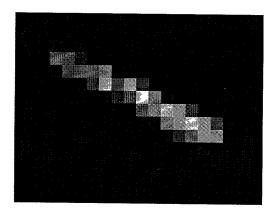


FIG. 1

For Binary Comparison: For Full Intensity Comparison:

 $\begin{array}{ll} {\rm Read\ number\ of\ detections} & {\rm Read\ number\ of\ detections} \\ {\rm in\ library\ image\ }(N_{\it library}) & {\rm in\ library\ image\ }(N_{\it library}) \\ \end{array}$

Set the intensity of all above- Determine average pixel intensity of zero pixels to a value of one above-threshold pixels (\bar{I}_{library})

FIG. 2

Title: METHOD FOR DETERMINING ATTITUDE OF AN OBJECT Attorney Docket No.: 7784-000389; Boeing Ref. No.: 01-312 (010011)
. Inventor: Thomas P. Weismuller

Mark D. Elchuk - (248 641-1600) Harness, Dickey & Pierce, P.L.C.

2/3

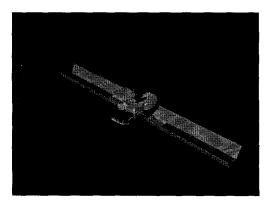


FIG. 3

For Binary Comparison:	For Full Intensity Comparison:
Determine number of detections	Determine number of detections
of object image ($N_{ m object}$)	of object image ($N_{ m object}$)
Offset origin of object	Offset origin of object
image $((X_{\text{object}}, Y_{\text{object}}))$	image $((X_{\text{object}}, Y_{\text{object}}))$
to upper left corner = $(0, 0)$	to upper left corner = (0, 0)
	Determine average pixel intensity of
	above-threshold pixels $ar{I}_{ ext{object}}$)

FIG. 4

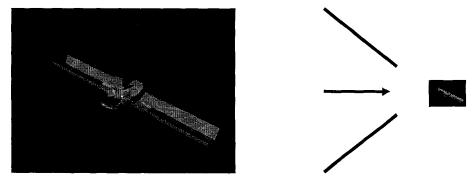


FIG. 5

Title: METHOD FOR DETERMINING ATTITUDE OF AN OBJECT Attorney Docket No.: 7784-000389; Boeing Ref. No.: 01-312 (010011) Inventor: Thomas P. Weismuller

Mark D. Elchuk - (248 641-1600) Harness, Dickey & Pierce, P.L.C.

3/3

